HORNBLASTERS

Bandit 127VX Installation Manual

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HornBlasters

Bandit 127VX Train Horn Kit Installation Guide

Before Getting Started

Read over the entire instruction guide before you begin your installation.

Kit Contents:

- HornBlasters Bandit Horn
- ViAir 20003 On Board Air Source Unit
- Fittings, Air Line, Wiring Kit

IMPORTANT: This complete train horn kit uses 12 volt DC components. Only install this kit with a 12 volt DC power source.

Important Safety Instructions

CAUTION: To prevent the risk of electrical shock or electrocution:

- Do not disassemble any electrical components of this horn kit (air compressor, air valve, pressure switch). Do not attempt repairs or modifications of any component. Please refer to qualified service agencies for all service and repairs.
- Do not operate any component where it can fall or be submerged into water or any kind of liquid.
- Do not reach for any component that has fallen or been submerged into water or any kind of liquid.
- Use the included components with 12 volt DC systems only.
- Do not leave the air system unattended during use.

WARNING: To prevent injury:

- Never allow children to operate the compressor or air horn. Use close supervision when operating this equipment near children.
- The air compressor will become very HOT during and immediately after operation. Do not touch any part of this compressor with your bare hands during or immediately after use.
- Do not use this product near open flames or explosive materials or where aerosol products are being used.
- Do not operate this product where oxygen is being administered.
- Do not pump anything other than atmospheric air.
- Never use this product while sleepy or drowsy.
- Do not use any tools or attachments with the supplied air source unit without first determining maximum air pressure for that tool or attachment.
- Never point any air nozzle or air sprayer toward another person or any part of your body.
- The included air compressor is equipped with an automatic reset thermal protector and can automatically restart after the thermal protector resets. Always cut off power source when thermal protector becomes activated.
- Use only in well ventilated areas.
- Do not sound the air horn(s) in close proximity to another person's or your own ear(s).
- Do not fill the included air tank above 150 PSI. Doing so may result in death or serious injury.

Safety During Installation

- Disconnect the ground of your battery before beginning your installation.
- Use eye protection when operating drills.
- Take your time and do not rush your installation.

Installing Your Train Horn Kit

Planning Your Installation

This is the most important step in your installation.

- Plan out the location of each component before starting your installation.
- Make sure you have enough air line and wire to install the system before beginning the installation.
- Make sure mounting locations are secure and void of debris.
- Try to keep the supply wire to the compressor as short as possible. Wires lose voltage over distance therefore shorter wires will result in better performance.
- Mount your air source unit in a location that is as cool as possible and away from heat sources. This will make your compressor run cooler and last longer.
- Your air source unit must be mounted upright with the compressor above the tank. Failure to mount the unit in this position will allow any condensation buildup to drain back in to the compressor and foul its components, and also will disrupt the compressor's ability to cool.
- Teflon tape or a locking compound should be used on every fitting in your air system to prevent air leaks.
- Air valves can be mounted in every direction but are recommended to be mounted vertically with the pilot housing above the valve body.
- Use the supplied 12 gauge wire or thicker (lower gauge #) wire to power your air compressor.

Recommended Tools

- 3/8" Long Socket (Horn Front Mount)
- 1/2" Long Socket (Horn Rear Mount)
- 1/2" Wrench (Std. Compression Fittings)
- 9/16" Wrench (1/4 NPT Fittings)
- 10mm Wrench or Socket (Air Source Mounting)
- 12mm Wrench (Metric Compression Fittings)
- Drill (With 3/16" Bit)
- Wire Cutter/Stripper
- Tubing Cutter/Razor
- Eye Protection

I. Installing Your HornBlasters Train Horn

Locate an area for your horn that is dry and free from debris. The horn can be mounted in any direction and still be heard from all around. The horns should not be mounted where they will be completely submerged or will receive any kind of impact. Horns may be mounted directly to your vehicle, on a medium such as grommet strips (plumber's strap), sheet metal or any sort of custom bracket.

1. Locate a secure, dry, safe position for your horns.
2. Make a mounting template by tracing the mounting bracket on the horn.
3. Using the mounting template drill 3/16" holes for the mounting bracket of the horn.
4. Secure the horn using the supplied mounting hardware.

II. Installing Your Air Source Unit

Locate a flat and secure installation area that will remain free of dust, dirt and debris (your compressors performance is directly affected by air quality). Try to keep the distance of the unit from the battery to a minimum to keep your compressor running at maximum performance.

1. Disconnect the ground cable from the vehicle's battery.
2. Position the unit in the desired location and secure it using the supplied mounting hardware (10mm).
3. 20005 Only: Remove the orange plug in the compressor's inlet and mount the included air filter in its place.

III. Installing Your Air Tubing & Air Valve

Before cutting any air tubing make sure to double check your measurements. Compression fittings useferrules (olives) that should be used only once. When threading any fittings make sure to use Teflon tape or lock-tight to prevent air leaks.The air valve may be mounted in any directionbut it is preferred that it is mounted vertically with arrow pointing towards the horn.

IMPORTANT: The air horns and connecting fittings up to the outlet of the air valve will use 1/2" air line. The air source unit will use 1/2" air line to connect to the inlet port of the air valve.
IMPORTANT: Do not make any kinks in your air line. Doing so will disrupt air flow and is irreversible.

Fitting Flow Chart
[Air Source] » [1/2" Line] » [1/2" to 1/2" NPT M Fitting] » [Air Valve] »

1. Plan out the fittings' placement out before you begin and make sure you understand the correct order.
2. Make sure that your tank is empty of air and that the compressor is not running during installation.
3. Install the air line carefully using two wrenches for each compression fitting. Use one wrench to hold the body of the fitting stationary and another to tighten the compression nut.
4. Measure and plumb one length of 1/2" tubing from the the tank compression fitting to the air valve located on the horn.
5. Next connect your air valve's inlet port to your air source unit using 1/2" air line.

IV. Wiring Your Valve & Air Source Unit

Your train horn kit will use two completely independent circuits. One circuit will connect your horn trigger (push-button intermittent switch, or toggled factory button) to your electric solenoid valve. The other circuit will connect your accessory trigger (ignition wire, accessory wire) to your air source kit.

Valve Wiring Flow Chart (Circuit 1)
[Horn Trigger] » [Air Valve] » [Ground]
Air Source Wiring Flow Chart (Circuit 2)
[Accessory Trigger] » [Inline Fuse] » [Air Source Unit] » [Ground]

Circuit 1

1. Begin by wiring your horn trigger.
    a. If you are intending to use your factory horn switch, start by locating the load wire of the horn button (positive when horn button is depressed in a standard vehicle) and wiring it to the included toggle switch (any side).
    b. If you are going to use a push button switch (intermittent toggle switch) wire a fused (5A) wire from any 12 volt source desired (battery) to your switch (any side).
2. Next wire your switch to any pole (red preferred) of your air valve.
3. Wire the other side (black preferred) of the air valve to ground.
4. Test your circuit by activating your trigger and listening for a quiet "click" sound from the valve.

Circuit 2

1. Locate an accessory line in your vehicle that is capable of a 16 amp load.
2. Wire your accessory line using an inline fuse (20A) to your air source unit (red wire).
3. Ground the other side of your air source unit (black wire) to ground.
4. Your air compressor system will now turn on automatically when power is on (key is in "Accessory" or "On" position and automatically turn itself off upon reaching destination.

You're Done!

It's time to test your horns! Send in your install photos for a chance to be featured on our website and don't forget to check out www.TrainHornForums.com, the largest train horn community on the internet!

Maintenance & Tips

Disconnect electrical components and drain your air system before performing maintenance.

General Air Horn System Maintenance

- Check your air horns for debris when appropriate and at least once a month and clean when necessary.
- Drain your air system at least once a month to remove any condensation buildup on the inside of your air tank.
- Make sure your air compressor is clean and free from debris at all times.
- Periodically change your two stage air filter on your compressor.

Tips

- Make sure your engine is running when your air compressors are in use to insure proper voltage and prevent damage to your system.
- Do not run your compressor above its maximum rated working pressure. Doing so will not only void your warranty but may also damage your compressor.
- The air horns are pre-tuned to a locomotive chord and to their loudest possible tone. Do not adjust the tuning screw on the horns. Doing so will void your warranty and may damage the horns if maladjusted.

Troubleshooting

Problem	Possible Cause(s)	Corrective Action
Air horn will not sound.	1. No pressure in air tank. 2. No power or toggle switch in 'Off' position. 3. Blown fuse. 4. Loose connections or bad ground in air valve circuit (circuit 1).	1. Check that air tank is pressurized. 2. Make sure all toggle switches are on. 3. Disconnect electrical components and replace fuse. 4. Check that all electrical circuits are secure and not corroded.
Horn tone changes when sounded.	1. A side fitting was used to connect the air source (line from valve) to the 5-point splitter manifold. 2. Air line connecting the horns is not of equal length.	1. Check that air source (line coming from valve) is entering the center fitting of the 5-point splitter manifold. 2. Check that the air line connecting each horn to the 5-point splitter manifold is of equal length.
Excessive moisture in horn or safety discharge.	1. Excessive water in air tank. 2. Compressor is exposed to high humidity.	1. Depressurize tank using safety, then drain tank. Tilt the tank to drain moisture and drain more frequently. 2. Move the compressor to an area with less humidity.
Compressor will not run.	1. No power or toggle switch in 'Off' position. 2. Blown fuse. 3. Motor overheat. 4. Faulty pressure switch.	1. Make sure all toggle switches are on. 2. Disconnect compressor from power and replace fuse (20A). 3. Let compressor cool off for about 30 minutes for thermal overload switch to reset. 4. Replace pressure switch.
Thermal overload protector cuts out repeatedly.	1. Lack of proper ventilation/ambient temperature too high. 2. Compressor valves failed.	1. Move compressor to a well ventilated area or an area with a lower ambient temperature. 2. Replace air compressor.
Excessive knocking or rattling.	1. Loose mounting bolts. 2. Worn bearing on eccentric or motor shaft. 3. Cylinder or piston ring is worn.	1. Tighten bolts. 2. Replace compressor. 3. Replace compressor.
Tank pressure drops when compressor shuts off.	1. Loose drain cock. 2. Air valve or check valve is leaking. 3. Loose connections. 4. Defective safety valve.	1. Tighten drain cock. 2. Replace air valve or check valve. 3. Check all air connections with soap and water solution and tighten as necessary. 4. Replace safety valve.
Compressor runs continuously and air flow lower than normal.	1. Excessive air usage. 2. Loose connections. 3. Worn piston ring or inlet valve. 4. Clogged air filter element.	1. Decrease air usage. 2. Check all connections with soap and water solution and tighten as necessary. 3. Replace compressor. 4. Replace air filter element.
Compressor runs continuously causing safety valve to open.	1. Faulty pressure switch. 2. Defective safety valve.	1. Replace pressure switch. 2. Replace safety valve.

Can't Figure It Out?

No problem! Give us a call at 813-783-8058, or email at support@hornblasters.com and we'll be more than happy to help you fix your system. Also feel free to visit our online train horn community, www.TrainHornForums.com, for more information.

Photograph & Media Submission Guidelines

Send in your installation photographs and any other media for a chance to be featured on our website!

General Photograph Submission Guidelines

- Please submit clean, concise photographs. Make sure your subject is clearly visible and in focus.
- You may submit any digital image format either via email at media@hornblasters.com, or via digital media (CD, DVD, etc).
- Make sure to include some kind of personal information with your submission. We would love to be able to contact you and thank you.

Installation Gallery Submission Guidelines

- Please take at least one photo of each of the major components of your installation (horns, compressor, tank, valve, switches, etc).
- Don't forget to send us some shots of your vehicle too! If we can't tell what the install is on, we probably won't post it.
- Include as much installation information as possible.
    - Who installed the system and when was it installed?
    - How long did it take?
    - What are the year, model, and style of your vehicle?
    - If you took your system to a shop, would you recommend the shop to others?
    - Do you have any comments or tips about the installation?
    - Anything else you want to tell us. We appreciate your feedback!
- Optionally include a little personal information:
    - Your name (if you would like your full name to be displayed, you have to let us know!)
    - Your State or Country, or even city/town if you would like. (This'll give you better visibility.)
    - How old were you when you had this kit installed?
- Remember, the more photos the better! We'll only pick out the best ones to post.

General Video Submission Guidelines

- We accept all kinds of media. Please provide us with the highest quality media to prevent video degradation.
- We can read all formats of video. We recommend using either the default your camera records with; or if you are compressing the video, we recommend using AVI containers and Xvid, Divx, or an MPEG codec. We recommend against using any kind of Windows Media*, Real Media*, or Apple QuickTime* formats.
- You may submit any digital image format either via email at media@hornblasters.com, or via digital media (CD, DVD, etc).
- Make sure to include some kind of personal information with your submission. We would love to be able to contact you and thank you!

*Windows, Windows Media, Real, Real Media, Apple, and QuickTime are all registered trademarks and copyright of their respective owners.

Get Involved In The Train Horn Community

No matter what your take is on your new train horn kit it's always good to have someone to share your stories with. TrainHornForums.com is the largest train horn community online and provides a place to share photos of your ride, post videos, catch up with other train horn and HornBlasters fans, meet other train horn enthusiasts, or even find help with a complicated question.
Go online to www.TrainHornForums.com and sign up today!

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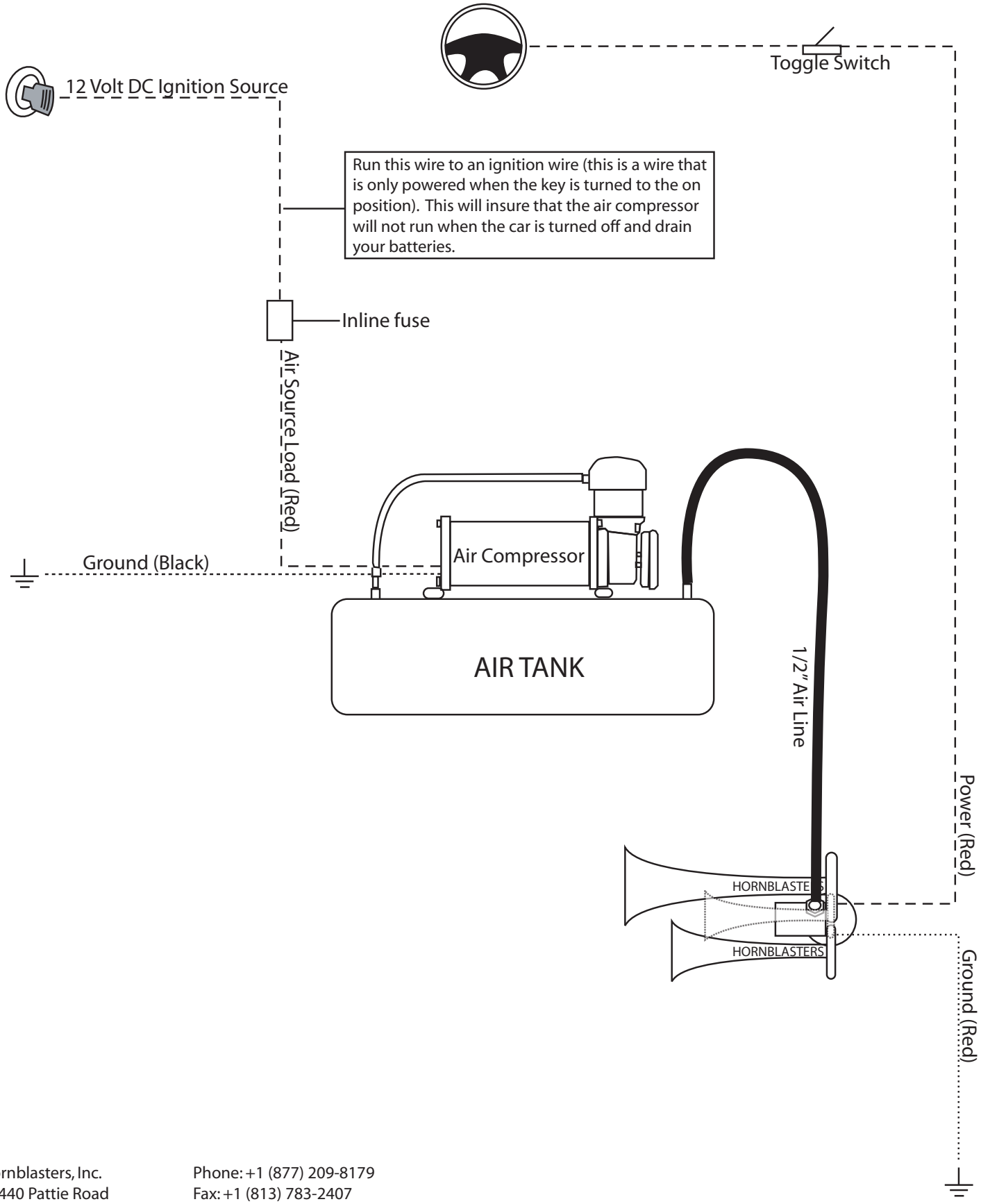
Bandit 1.5 Gallon Tank/Comp. Combo Installation Diagram


Toggle Switch
12 Volt DC Ignition Source
Run this wire to an ignition wire (this is a wire that is only powered when the key is turned to the on position). This will insure that the air compressor will not run when the car is turned off and drain your batteries.
Inline fuse
Air Source Load (Red)
Ground (Black)
Air Compressor
AIR TANK
1/2" Air Line
Power (Red)
HORNBLASTERS
HORNBLASTERS
Ground (Red)

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